

it and rejected it over prior art. Claim 8 (now 17) was rejected as being in improper "use" form, but again, there was no restriction requirement. We submit that claims 17 and 18 were not constructively non-elected, and are directed to subject matter which was presented originally and has already been examined on the merits.

We turn to the prior art rejections over Grunbacher et al. (WO 96/19395). For the examiner's information, we have found that this document corresponds to U.S. Patent 5540358.

A stated object of the present invention is to reduce the danger of a tube tipping over when standing upright in a filled condition. That object is solved by providing a tube with a shoulder piece forming a sealable outlet piece and a flange that is attached to the end or face wall of the tube. The shoulder piece is stiffer than the plastic film material of the tube, whose two side walls have strip-shaped side edge sections. Near the forward end of the tube, the inner boundaries of the side edge sections are angled or bent in towards one another. See references 25 and 26 in Fig. 1. These limitations are present in claim 10. The tube is further stiffened by the tabs or "clips" 24 also visible in Fig. 1. These tabs protrude upward from the flange, inside the tube, reinforcing its side walls where the edge sections 17, 18 are not present. These clips are present in claim 11.

In our view, Grunbacher et al. is somewhat contradictory to the invention now claimed. In Grunbacher, the shoulder piece was preferably an integral part of the body of the tube (page 3, line 35 to page 4, line 29-31). Grunbacher et al. further disclosed on page 5, lines 21-28 how to process the face wall of the tube, especially how to produce the V-shaped seals 23 and 24 by hot bar hear sealing, impulse sealing, ultrasonic or hot wire in such a way that the end of the tube could be bent over flat to extract the most possible material from the tube.

We conclude that Grunbacher et al. would not have motivated the skilled person to provide a separate shoulder piece, made of a material stiffer than the plastic material used for the tube body. In addition, Grunbacher et al. does not suggest that the inner boundaries of the side edge sections, especially in the vicinity of or adjacent to the face wall, should be angled or bent towards one another. The edge sections of the reference appear to be parallel, and nothing in Grunbacher would lead a person to deviate from his parallel arrangement. Grunbacher's gusset panels, while they serve to provide some reinforcement, are not comparable to the structures now claimed.

The secondary references do not overcome the above-noted deficiencies of Grunbacher as a primary reference.

We submit, therefore, that the subject matter of the amended claim 10 is patentable over Grunbacher et al. Claim 11 is deemed allowable, in addition, for the reinforcing clips (items 24 in Fig. 1), which clearly have no counterpart in Grunbacher et al. Claims 12 to 16 – all dependent – are deemed allowable over the art of record not only for the subject matter they inherit from claim 10, but for their additional limitations, in combination with those of claim 10.

The courtesy of the telephone interview today was appreciated. We have repeated above the arguments that we advanced at the interview, where the examiner indicated he would consider specific claim language subsequently submitted. The examiner is invited to telephone the undersigned if he finds any issue of patentability unresolved, or if a more detailed interview summary is required.

Respectfully,



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I certify that this paper is being trans-
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Charles Feller

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10. (currently amended) A tube comprising a plastic film material and a shoulder piece, ~~said plastic film material forming one face wall and two side walls of said tube~~
the tube having one face wall and two side walls formed by said plastic film material,
wherein

the side walls are joined to one another along two strip-shaped side edge sections and along one strip-shaped end edge section, and wherein each of said strip-shaped side edge sections has a width of at least 6.5% of the total width of said side walls, said side edge section width being at least 4 mm,

said plastic film material being a laminate comprising at least one 60-200 micron thick inner seal layer and a 10-25 micron thick outside layer,

said shoulder piece being stiffer than said plastic film material, ~~said shoulder piece~~ and comprising a sealable outlet connection piece and a flange, said flange being attached to said face wall,

wherein the inner boundaries of the two side edge sections, adjacent to said face wall and facing one another in the area of said face wall, are angled or bent to the inside towards one another.

11. (previously added) A tube according to claim 10, wherein the flange of the shoulder piece at the edges of the face wall comprises two bent clips, said clips being arranged in the middle areas of the side walls between the two strip-shaped side edge sections.

12. (previously added) A tube according to claim 10, wherein the inner seal layer consists of polypropylene and/or polyethylene.

D2
Contd

13. (previously added) A tube according to claim 10, wherein the outside layer consists of polyethylene terephthalate and/or polyethylene naphthalate.

D3

14. (previously added) A tube according to claim 10, further comprising a barrier layer between the inner seal area and the outer layer.

D4

15. (previously added) A tube according to claim 14, wherein the barrier layer consists of aluminum and has a thickness of 7-12 microns.

16. (previously added) A tube according to claim 14, wherein the barrier layer consists of para-aramide.

17. (previously added) A method of using a plastic bag as a tube, said plastic bag comprising a plastic film material and a shoulder piece,

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said plastic film material forming one face wall and two side walls of said tube, wherein the side walls are jointed to one another along two strip-shaped side edge sections and along one strip-shaped end edge section, and wherein each of said strip-shaped side edge sections has a width of at least 6.5% of the total width of said side walls, said side edge section width being at least 4 mm,

D5

said plastic film material being a laminate comprising at least one 60-200 micron thick inner seal layer and a 10-25 micron thick outside layer,

said shoulder piece being stiffer than said plastic film material, said shoulder piece comprising a sealable outlet connection piece and a flange, said flange being attached to said face wall,

wherein the inner boundaries of the two side edge sections, facing one another in the area of said face wall, are angled or bent to the inside towards one another.

18. (currently amended) A process for producing a tube, said process comprising steps of

providing a plastic film material and a shoulder piece, said plastic film material being a laminate comprising at least one 60-200 micron thick inner seal layer and a 10-25 micron thick outside layer,

joining the side walls to one another along the strip-shaped side edge sections, wherein the strip-shaped side edge sections each have a width of at least 6.5% of the total width of the side wall, said side edge section width being at least 4 mm, wherein the strip-shaped side edge sections are welded to one another such that the inner boundaries of the two side edge sections facing one another in the area of the face wall are angled or bent ~~to the inside downward to~~ toward one another,

connecting said shoulder piece with the face wall, said shoulder piece comprising a closed outlet connection piece and being stiffer than said plastic film material,

filling the tube from the side opposite the face wall, and

closing the side opposite the face wall along one strip-shaped end edge section.